



Washington, D.C. 20231

FIRST NAMED INVENTOR APPLICATION NO. FILING DATE ATTORNEY DOCKET NO. 04/21/98 GAGNE R T8463785US 026643 **EXAMINER** TM02/1024 PETER J. GORDON, PATENT COUNSEL AVID TECHNOLOGY, INC. BASHORE, W ONE PARK WEST ART UNIT PAPER NUMBER TEWKSBURY MA 01876 2176 DATE MAILED: 10/24/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

1- File Copy

Office Action Summary

Application No. **09/063,289**

Applicant(s)

Gagne, Rejean

Examiner

William L. Bashore

Art Unit **2176**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on Aug 6, 2001 2b) This action is non-final. 2a) This action is FINAL. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. Disp sition of Claims is/are pending in the application. 4) 💢 Claim(s) <u>1-11</u> 4a) Of the above, claim(s) ______ is/are withdrawn from consideratio is/are allowed. 5) U Claim(s) 6) X Claim(s) 1-11 is/are rejected. is/are objected to. 7) Claim(s) are subject to restriction and/or election requirement 8) Claims **Application Papers** 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on ______ is/are objected to by the Examiner. 11) The proposed drawing correction filed on _____ is: a is: a approved by disapproved. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). a) \square All b) \square Some* c) \square None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). Attachment(s) 15) X Notice of References Cited (PTO-892) 18) Interview Summary (PTO-413) Paper No(s). 19) Notice of Informal Patent Application (PTO-152) 16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s). 20) Other:

Art Unit: 2176

DETAILED ACTION

- 1. This action is in response to communications: CPA and Request for Reconsideration, both filed on 8/6/2001 to the original application filed on 4/21/1998, IDS filed on 12/20/1999.
- 2. The rejection of claims 1-11 under 35 U.S.C. 103(a) as being unpatentable over Hill and Hamakawa has been withdrawn as necessitated by Applicant's submission of Declaration under 35 U.S.C. 103(c), as applied specifically to the Hill reference, rendering the Examiner's rejections as unsustainable.
- 3. Claims 1-11 are pending in this case. Claims 1, 4, 11 are independent claims.

Continued Prosecution Application

The request filed on 8/6/2001 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/063,289 is acceptable and a CPA has been established. An action on the CPA follows.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boezeman et al. (hereinafter Boezeman), U.S. Patent No. 5,889,514 filed 3/29/1996 and issued 3/30/1999, in view of Hamakawa et al. (Hereinafter Hamakawa), Object composition and playback models for handling

Art Unit: 2176

multimedia data, ACM Proceedings of the conference on Multimedia '93, August 2-6, 1993, pp.273-281.

In regard to independent claim 1, Boezeman teaches:

- time based data of at least two differing data types (Boezeman Figure 7 items "Animation", AudioPlay", "VideoPlay"; compare with claim 1 preamble "A method for accessing....comprising the steps of").

- selecting and positioning a first clip object representing a first selected time-based data source, with respect to a relative time line, said clips are of differing types (Boezeman, Figure 10 item 124, column 8 lines 15-20; compare with claim 1(I) "selecting a first time-based data source comprising a first data type from a selection of available data sources", and 1(ii) "positioning a first clip object... for accessing said first time-based data source").

- selecting and positioning a second data-clip, comprising a different data type as compared to said first selected time-based data source (Boezeman, Figure 10 item 140, column 8 lines 15-20; compare with claim 1(iii) "selecting a second time-based data source....a different data type than said first time-based data source", and 1(iv) "positioning a second clip object....for accessing said second time-based data source").

- one or more source clips and spacers positioned in an editable graphical object utilizing start and duration times (rT and aT), said positioning relative both to each other (rT), as well as to a global time line (aT) (Boezeman, Figure 2, column 8 lines 10-20, 34-40, 60-67, column 9 lines 15-25; compare with claim 1(v) "creating at least one meta-clip object representing....distinct from said local time line").

?

- Boezeman does not specifically teach said objects re-mapped to a global time line subsequent to

Art Unit: 2176

repositioning of a meta-object. However, Hamakawa teaches an object composition model comprising multimedia objects, each with its own relative time line, temporally re-mapped with respect to a global time line in a box, utilizing "temporal glue" recalculation (Hamakawa p.274 column 1, Object Composition Model, sections: Temporal glue, Object hierarchy, relative location. Also see p.274 column 2, section Box, and p.275 Figure 4 (Box Example); compare with claim 1(v) "such that the start time and duration of each of said....relative to the global time line"). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Hamakawa to Boezeman, because of Hamakawa's taught advantage of automatic temporal re-mapping of time lines within groupings (meta-clips) of multimedia objects, providing increased convenience (due to the elimination for precise time line locations), to Boezeman's NLE editor (Hamakawa p.277 column 2, near bottorn).

- clip data which can be selected and used as needed (Boezeman Figure 2). Boezeman does not specifically teach incorporation of a meta-clip to a list of available resources. However, Hamakawa teaches a method incorporating a group of multimedia objects (Hamakawa p.275 Figure 4; compare with claim 1(vi) "adding said at least one meta-clip object to said list of available data sources"). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Hamakawa to Boezeman, because of Hamakawa's taught advantage of hierarchically categorized composite objects, providing an increased number of object groupings to be used by Boezeman's NLE system.

In regard to dependent claim 2, Boezeman does not specifically teach a method of incorporating a meta-clip object in cooperation with other objects, whereby said objects within a meta-clip object are mapped to said meta-clip object, and in turn, mapped to a global time line. However, Hamakawa teaches an object

composition model comprising multimedia objects, each with its own relative time line, temporally re-mapped with respect to a global time line in a box, utilizing "temporal glue" recalculation (Hamakawa p.274 column 1, Object Composition Model, sections: Temporal glue, Object hierarchy, relative location. See also p.274 column 2, section Box, and p.275 Figure 4 (Box Example); compare with claim 2). In addition, Hamakawa incorporates said composite objects within other composite objects in the form of a composite hierarchy, whereby all relative time lines are re-calculated as needed (Hamakawa p.274 Figure 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Hamakawa to Boezeman, because of Hamakawa's taught advantage of hierarchical temporal re-mapping of time lines within groupings of multimedia composite objects, providing increased convenience (due to the elimination for precise time line locations - Hamakawa p.277 column 2, near bottom) to Boezeman's NLE method.

Page 5

In regard to dependent claim 3, Boezeman teaches incorporating effects such as play spacers, hide spacers, and move spacers, which can be positioned and manipulated within the invention as taught by Boezeman (Boezeman column 2 lines 49-53; compare with claim 3). Claim 3 would have been obvious to one of ordinary skill in the art at the time of the invention, in view of Boezeman, because of Boezeman's taught advantage of editable spacer effects, which in turn are examples of special effects applied to media editing systems (NLE) as taught by Boezeman.

In regard to independent claim 4, Boezeman teaches:

- teaches positioning of a first clip object representing a first selected time-based data source, with respect to a time line, incorporating a start/duration time (Boezeman, Figure 10 items 124, 140, column 8 lines 15-20; compare with claim 4(I) "creating at least one meta-clip object", and 4(I) "a first clip object

Art Unit: 2176

representing a first time based data source selected from a list of available data sources, and a second clip object representing a second time based data source selected from the list of available data sources").

- selection and positioning of a second data-clip, comprising a different data type as compared to said first selected time-based data source, and with start/stop times (Boezeman, Figure 10 items 124, 140, column 8 lines 15-20; compare with claim 4(I) "the second data source being of a different data type than the first data source", and 4(I) "a respective start time and duration").
- one or more source clips and spacers positioned in an editable graphical object utilizing start and duration times (rT and aT), said positioning relative both to each other (rT), as well as to a global time line (aT) (Boezeman, Figure 2, column 8 lines 10-20, 34-40, 60-67, column 9 lines 15-25; compare with claim 4(I) "a respective local time line distinct from the global time line", and 4(I) "clip objects being positioned relative to the local time line").
- Boezeman does not specifically teach a method of incorporating at least one meta-clip to a list of available resources. However, Hamakawa teaches a method incorporating a group of multimedia objects (Hamakawa p.275 Figure 4; compare with claim 4(ii) "adding said at least one meta-clip object to said list of available data sources"). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Hamakawa to Boezeman, because of Hamakawa's taught advantage of hierarchically categorized composite objects, providing an increased number of object type groupings to be used by the NLE system as taught by Boezeman.
- one or more source clips are positioned in an editable graphical object utilizing relative start and duration times, and with said positioning relative both to each other, as well as to an absolute time line (Boezeman, Figure 2, column 8 lines 10-20, 34-40, 60-67, column 9 lines 15-25; compare with claim 4(iii) "selecting at least one of the meta-clip objects from said list....the global time line").

Application/Control Number: 09/063,289

Page 7

Art Unit: 2176

- Boezeman does not specifically teach a method whereby said objects are positioned and re-mapped to a global time line according to respective local time lines. However, Hamakawa teaches an object composition model comprising multimedia objects, each with its own time line, temporally re-mapped with respect to a global time line in a box, utilizing "temporal glue" recalculation (Hamakawa p.274 column 1, Object Composition Model, sections: Temporal glue, Object hierarchy, relative location. Also see p.274 column 2, section Box, and p.275 Figure 4 (Box Example); compare with claim 4(iv) "re-mapping to the global time line the start time....relative to the global time line"). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Hamakawa to Boezeman, because of Hamakawa's taught advantage of automatic temporal re-mapping of time lines within groupings of multimedia objects, providing increased convenience (due to the elimination for precise time line locations, (Hamakawa p.277 column 2, near bottom) to the NLE method as taught by Boezeman.

In regard to dependent claim 5, claim 5 incorporates substantially similar subject matter as claimed in claim 2, and is rejected along the same rationale.

In regard to dependent claim 6, claim 6 incorporates substantially similar subject matter as claimed in claim 3, and is rejected along the same rationale.

In regard to dependent claim 7, claim 7 incorporates substantially similar subject matter as claimed in claim 3, and in further view of the following, is rejected along the same rationale.

Boezeman teaches incorporation of spacer effects, which can be positioned and manipulated within an edit track (Boezeman column 2 lines 47-58). Hill does not specifically teach a method of incorporating

Art Unit: 2176

said effects to at least one meta-clip object. However Hamakawa teaches a method of composite objects incorporating media clips with relative time lines (Hamakawa p.275 Figure 4; compare with claim 7). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Hamakawa to Boezeman, because of Hamakawa's taught advantage of composite objects, providing an additional object type (including tracks) for the incorporation of effects, as taught by Boezeman.

In regard to dependent claim 8, Boezeman does not specifically teach the use of operator(s) to modify data from each time-based data source in a meta-clip. However, Hamakawa teaches a method of a composite object "Box", incorporating a conglomeration of different media object types along with relative time lines assigned per said type, with said Box incorporated as a composite object within a hierarchy of objects (Hamakawa p.274 Figure 3, and p.275 Figure 4; compare with claim 8). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the Hamakawa to Boezeman, because of Hamakawa's taught advantage of composite objects, providing a conglomeration of track types available for the incorporation of effects, as taught by Boezeman.

In regard to dependent claim 9, Boezeman teaches a method of play spacers, hide spacers, and rate spacers, whereby a clip is shortened or lengthened, hidden and played when necessary (Boezeman column 2 lines 47-58; compare with claim 9).

In regard to dependent claim 10, claim 10 is rejected using the Examiner's argument and rationale as set forth in the rejection of claim 9.

Application/Control Number: 09/063,289

Page 9

Art Unit: 2176

In regard to independent claim 11, Boezeman teaches:

- time based data of at least two differing data types (Boezeman Figure 7 items "Animation", AudioPlay", "VideoPlay"; compare with claim 11 preamble "...time based data of at least two differing data types...").
- an internal hard drive, a CPU, a display screen, and an input device (Boezeman Figure 1; compare with claim 11 "a storage device...", "a computer operatively connected...", "at least one output device...", and "at least one input device...").
- one or more source clips positioned in an editable graphical object utilizing relative start and duration times, with said positioning relative both to each other, as well as to an absolute time line (Boezeman, Figure 2, column 8 lines 10-20, 34-40, 60-67, column 9 lines 15-25, compare with claim 11(a) "a first object representing a first one of the stored data sources, a second object representing a second one", and claim 11(a) "each comprising a respective local time line", and 11(a) "clip objects being positioned relative to the local time line").).
- Boezeman does not specifically teach a method of incorporating a meta-clip object. However, Hamakawa teaches an object composition model comprising multimedia objects, each with its own relative time line (Hamakawa p.274 column 1, Object Composition Model, sections: Temporal glue, Object hierarchy, relative location. See also p.274 column 2, section Box, and p.275 Figure 4 (Box Example); compare with claim 11(a) "creating with the computer at least one meta-clip object"). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Hamakawa to Boezeman, because of Hamakawa's taught advantage of composite objects, providing a way to hierarchically organize groups of tracks within Boezeman's NLE editor.

ż

Art Unit: 2176

- selecting and positioning a first clip object representing a first selected time-based data source, with respect to a relative time line, said clips are of differing types (Boezeman, Figure 10 item 124, column 8 lines 15-20; compare with claim 11(a) "the second data source being of a different data type than the first data source", and 11(a) "a respective start time and duration").

- one or more source clips positioned in an editable graphical object utilizing relative start and duration times, and with said positioning relative both to each other, as well as to an absolute time line (Boezeman, Figure 2, column 8 lines 10-20, 34-40, 60-67, column 9 lines 15-25; compare with claim 11(b) "selecting with the computer at least one of the meta-clip objects").

- Boezeman does not specifically teach a method of using an NLE object in cooperation with other objects, whereby said objects are positioned and re-mapped to a global time line according to respective local time lines. However, Hamakawa teaches an object composition model comprising multimedia objects, each with its own time line, temporally re-mapped with respect to a global time line in a box, utilizing "temporal glue" recalculation (Hamakawa p.274 column 1, Object Composition Model, sections: Temporal glue, Object hierarchy, relative location. Also see p.274 column 2, section Box, and p.275 Figure 4 (Box Example); compare with claim 11c "define with the computer....and said global time line"). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Hamakawa to the method of Boezeman, because of Hamakawa's taught advantage of automatic temporal re-mapping of time lines within groupings of multimedia objects, providing increased convenience (due to the elimination for precise time line locations, (Hamakawa p.277 column 2, near bottom) to the NLE method as taught by Boezeman.

Art Unit: 2176

Response to Arguments

7. Applicant's arguments filed 12/11/2000 regarding the Hill reference have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 12/11/2000 regarding the Hamakawa reference have been fully and carefully considered but they are not persuasive.

Applicant argues on page 8 (bottom paragraph) that Hamakawa does not teach the limitations of claim 1. The Examiner uses Hill to essentially teach editing and positioning of multimedia clips in a non-linear editing embodiment. Hamakawa is used by the Examiner to teach multimedia objects (media clips) containing multimedia data. It is to be noted that the Object Hierarchy diagram (Hamakawa Figure 3), reflects an object oriented paradigm. Thus, each "object" contains encapsulated data. Hamakawa's teaching of a "time length of each object" (Hamakawa p.274 column 1, heading: Object hierarchy (near bottom of page)), suggests a time line for each said object. The distinction between these time lines and a global time line is reinforced by the hierarchy model, itself. Each separate time line is determined when a higher ranking object is determined. Therefore, each object's time line is not only related to other object's time lines, but is also related by way of inheritance, to the time line of the highest ranking object (the root object in Figure 3). The Examiner applies the teachings of Hamakawa to the NLE clips of Hill. Specifying the location of each object relative to each other reveals (by way of object oriented inheritance) time line relationships between said objects and the highest ranking object, which is indicative of a global time line.

Applicant further argues on page 10 of the amendment that Hamakawa does not teach re-mapping of time lines relative to a global time line. The Examiner notes that even though (as Applicant points out) "Hamakawa makes use of relative locations in time and space between objects to remap the objects to a

Art Unit: 2176

common global time line", separate time lines are still involved and are used (using inheritance) to ultimately reflect dependancy upon a global time line, after re-mapping.

Conclusion

- 8. Prior art made of record and not relied upon is considered pertinent to disclosure.
 French et al. U.S. Patent No. 6,266,053 filed 4/3/1998 issued 7/24/2001
 - Sauer, Jeff, HEURIS/Pulitzer's MPEG Power Professional: Non-linear Editors as MPEG Encoders, March 1997, Emedia Professional, pp. 97-100.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Bashore whose telephone number is (703) 308-5807. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Heather Herndon, can be reached on (703) 308-5186. The fax number to this art unit is (703) 308-6606.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Art Unit: 2176

10. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(703) 746-7239 (for formal communications intended for entry)

or:

(703) 746-7240 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

or:

(703) 746-7238 (for after-final communications)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (Receptionist).

William L. Bashore 10/11/2001

JOSEPH H. FEILD PRIMARY FXAMINER